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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.				
09/424,623	03/27/2000	ANTTI TOSKALA	297-009040-U	8253				
7590 07/12/2005								
CLARENCE A GREEN PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06430		<table border="1"><tr><td>EXAMINER</td></tr><tr><td>AHN, SAM K</td></tr></table>			EXAMINER	AHN, SAM K		
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		<table border="1"><tr><td>ART UNIT</td><td>PAPER NUMBER</td></tr><tr><td>2637</td><td></td></tr></table>			ART UNIT	PAPER NUMBER	2637	
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DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/424,623

Applicant(s)

TOSKALA ET AL.

Examiner

Sam K. Ahn

Art Unit

2637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on amendment, 02/07/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-7 and 15 is/are allowed.
- 6) ☒ Claim(s) 8,9,12,13 and 16 is/are rejected.
- 7) ☒ Claim(s) 10,11 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see p,10-11, filed on 02/07/05, with respect to the rejection(s) of claim(s) 8,9,12,13 and 16 under 103(a), respectively, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Dent.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 8,9,12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dent USP 5,724,666 in view of Saito (cited previously).

Regarding claims 8, 12 and 16, Dent teaches a radio apparatus and a method comprising a diversity receiver (see Fig.3) which has a first reception branch (65 to 66A) and a second reception branch (65 to 66B), a rake receiver (66A) and a measuring receiver (66B) for making measurements, characterized in that it is arranged so as to tune the first reception branch to a different frequency than the second reception branch and to make measurements of a signal produced by one reception branch simultaneously with the reception of a signal produced by the other reception branch (note col.2, lines 58-65). Dent further teaches wherein

the tuning of said first reception branch to other frequencies is timed according to a certain predetermined timetable which is known to at least one base station (note col.7, lines 8-20).

However, Dent does not explicitly teach the rake receiver having correlator branches to combine signals received by different reception branches.

Saito teaches a rake receiver (see Fig.6) comprising correlator branches (84n~840) to combine (85) signals received by different reception branches.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the teaching of Saito in the rake receiver of Dent for the purpose of combating any fading signals in the received signal, which is well-known advantage in the art of having a rake receiver.

Regarding claim 9, Dent in view of Saito teach all subject matter claimed, as applied to claim 8. Dent does not explicitly teach wherein the transmitter apparatus transmitting at the operating frequency is also requested to transmit at a higher power during the time that at least one branch of the diversity receiver is tuned to other than the operating frequency.

Saito teaches wherein the transmitter apparatus transmitting at the operating frequency is also requested to transmit at a higher power (note col.11, line 30 – col.12, line 16). Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the teaching of Saito in the system of Dent for the purpose of transmitting the request to transmit at a higher power,

which is well-known implement to one skilled in the art, when the receiver does not detect signals at a reasonable level (e.g. when the received signal is below the level of a threshold).

3. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dent USP 5,724,666 in view of Saito (cited previously) and Wan, USP 6,680,920 B1 (cited previously).

Regarding claim 13, Dent in view of Saito teach all subject matter claimed, as applied to claim 8. Although Dent teaches at least one branch of the diversity receiver tuning to other than the operating frequency, as explained above, Dent does not explicitly teach in regards to the limitation of bit errors being corrected by an interleaver.

Wan teaches power management of a mobile station and further teaches wherein interleaving is implemented to correct bit transmission errors (note col.10, lines 6-20). Therefore, it would have been obvious to one skilled in the art at the time of the invention to include interleaving in the system of Dent as taught by Wan for the purpose of reducing bit errors to combat against noise and interference.

#### ***Allowable Subject Matter***

4. Claims 2-7 and 15 are allowable.

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5. Claims 10,11 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Ahn whose telephone number is (571) 272-3044. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sam K. Ahn  
07/08/05

TEMESGHEN BREBRETINSAE  
PRIMARY EXAMINER

7/11/05